

### THE ABSTRACT

Please amend the abstract as follows:

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## **PROCESS FOR MULTIPLE ACCESS AND MULTIPLE TRANSMISSION OF DATA IN A MULTI-USER SYSTEM FOR THE POINT TO MULTIPLEX TRANSMISSION OF DATA OVER THE ELECTRICITY NETWORK.**

~~This process applies to a number of user kits (A, B,...X) and a head-end kit (1) communicating over the electricity network (2) by means of an upstream channel and a downstream channel.~~

~~In essence, the process comprises:~~

~~access by multiple user kits (A, B,...X) in the upstream channel and the sending of multiple information frames by the head-end (1) in the downstream channel simultaneously by means of OFDMA/TDMA/CDMA multiplexing;~~

- ~~— a criterion to dynamically assign each carrier so as to maximize transmission capacity in both the upstream and downstream channels;~~
- ~~— adjustable quality of service according to the type of information and the user that requires the transmission; and~~
- ~~— dynamic allocation of bandwidth by means of constantly calculating and monitoring the signal-to-noise ratio.~~

This process applies to a number of user kits (A, B,...X) and a head-end kit (1) communicating over the electricity network (2) using an upstream channel and a downstream channel. In essence, the process comprises accessing by multiple user kits (A, B,...X) in the upstream channel and the sending of multiple information frames by the head-end (1) in the downstream channel simultaneously applying OFDMA/TDMA/CDMA multiplexing and dynamically assigning each carrier so as to maximize transmission capacity in both the upstream and downstream channels. In turn, the process allows the adjustment of the quality of service according to the type of information and the user that requires the transmission and the dynamic allocation of bandwidth through constantly calculating the signal-to-noise ratio.